



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/589,550

07/03/2007

Yeong-Tae No

4900-0014

8532

22429

7590

12/22/2011

LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

EXAMINER

WYCHE, MYRON

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

12/22/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,550	Applicant(s) NO ET AL.	
	Examiner MYRON WYCHE	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-24 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-24 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Response to Arguments***

Applicant's representatives arguments with respect to claims 1-24, filed 4/14/11, have been fully considered but they are not persuasive. Applicant's representative primarily argues that the newly added claim limitation: "wherein the combination includes at least (a subscriber information sound) + (a general ringback tone)" is not clearly disclosed by the combination of Kim et al. and Jiang et al. However, it is respectfully submitted that Jiang et al. actually does disclose this limitation as is discussed below.

At [0024], Jiang et al. discloses: "the intelligent peripheral (IP) 116 is a unit that stores the ringback tones"; and at [0025], Jiang et al. discloses: "the IP 116 provides audio and/or video information to MSC 104, which transmits this content back to calling party 108" (emphasis added). That is, Jiang et al. clearly discloses: "ringback tones" that are combinations of "audio and/or video information" that are provided as content that is transmitted "back to a calling party". Further, at [0026], Jiang et al. discloses an example of the concept discussed above in terms of: "the subscriber could provide his or her own audio clip (e.g., 'Hello, this is John. Please listen to my favorite song while my phone rings')".

Thus, based on the above discussion, it is respectfully submitted that Jiang et al. discloses "ringback tones" that are a combinations of "audio and/or video information" that read on the recited: "wherein the combination ([0025]: "audio and/or video information") includes at least (a subscriber information sound)" ([0026]: "Hello, this is John. Please listen to my favorite song") + "(a general ringback tone)" (as suggested by Jiang et al. at [0026]: "while my phone rings"). Therefore, it is respectfully submitted that the Jiang et al. reference of the combination of Kim et al. and Jiang et al. does indeed disclose the newly added limitations, as is indicated in the rejections below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2617

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 6, 10, 14, 15, 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2007/0123311 (Kim et al.) in view of US Patent Application Publication No. 2004/0120494 (Jiang et al.).

Regarding claim 1 Kim et al. discloses: “a home location register (**FIG. 1: 12, 22; [0022]: “a single HLR may provide services to both switches”**) providing a call-terminating exchanger (**FIG. 1, 20: “T_MSC”**) with first information about whether or not a registered ringback tone is to be replaced (**FIG. 2: 100, 101; [0030]: “determines whether the called party is subscribed to the substitute ringback tone service”**) and second information for routing to sound providing means (**FIG. 1, 30: “substitute ringback tone playserver”**) when a calling terminal is registered in the call-terminating exchanger” (**FIG. 1: 12, 22; [0030]: “routes the call to the play server 30”**); and “the sound providing means (**FIG. 1, 30**) call-connecting to the calling terminal, detecting a specific sound set corresponding to the called terminal, and providing the calling terminal with the detected specific sound when the request of the call connection is received” (**FIG. 1: 10, 20, 30; [0024]: “sound information to reproduce and provide the calling party through the terminating switch 20 and the originating switch 10” ;FIG. 2: 101-105; [0030] - [0031]**).

However, Kim et al. does not appear to clearly disclose the remaining limitations of the invention. To that end, in the same field of endeavor (i.e., telephone networks with custom/substitute ringback tone capabilities) Jiang et al. discloses: “the call-terminating exchanger (**FIG. 1, 106: “GMSC”**) requesting a call connection to the sound providing means (**FIG. 1, 116: IP/IVR; FIG. 2: 230**) based on the first and the second information (**FIG. 2, 225: “GMSC”**) when the calling terminal requests a call to a called terminal” (**FIG. 2: 205; FIG. 4: 4; [0064]: “MSC routes the call to the IP/IVR over ANSI/ETSI ISUP via IAM”**); and “wherein the specific sound is generated by combining a subscriber information sound for specific information (**FIG. 1, 116: IP/IVR; [0025]: “contain the specific audio/video clip to be played”**), which

Art Unit: 2617

identifies a called subscriber or represent a character of the called subscriber (**FIG. 4: 5, 6; [0066]: “identifying which personalized Ringback to play”**), with a common ringback tone replacement sound set by the called subscriber, wherein the combination (**[0025]: “audio and/or video information”**) includes at least (a subscriber information sound) (**[0026]: “Hello, this is John. Please listen to my favorite song”**) + (a general ringback tone)” (**[0026]: “while my phone rings”**).

It is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kim et al. with Jiang et al. in order to allow the subscriber to personalize and select from a wide variety of ringback tones that are made available via a database instead of using standard ringback tones available today (see Jiang et al. at **[0007]**). Claims 10 and 19 recite similar language to that discussed above for claim 1 and thus are also disclosed by Kim et al. and Jiang et al.

Regarding claims 3 and 21, Kim et al. discloses: “the subscriber information sound is inputted as a voice via an ARS” (**FIG. 1: 56**).

Regarding claims 5, 14 and 22, Kim et al. discloses: “the specific information includes at least one of a phone number, name, nick name and character of the called subscriber” (**[0014]: “the system changes the substitute ringback to of the user by storing the phone number of the user”**).

With respect to claims 6 and 15, Kim et al. discloses an existing Intelligent Network (IN) service with a general ringback tone in the form of: “a common ringback tone” (**FIG. 2: 102**); and a personal/custom ringback sound in the form of: “a substitute ringback tone” (**FIG. 2: 105**). In addition, Jiang et al. discloses: “the combination includes one or more among: (subscriber information sound)+(the replacement sound)+(the subscriber information sound); (the replacement sound)+(the subscriber information sound)+(the replacement sound); (the subscriber information sound)+(a replacement sound 1)+(a replacement sound 2)+ (the subscriber information sound); (a subscriber information sound 1)+(the replacement sound 1)+(a subscriber information sound 2)+(the replacement sound 2); and (the replacement sound 1)+(the subscriber information sound 1)+(a replacement sound 2)+(the subscriber information sound 2)” (**[0018]: “combining the custom ringback mechanisms with an existing IN service can be achieved”**).

Art Unit: 2617

Claims 2, 11, 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Jiang et al. and US Patent No. 6,768,789 (Wilk).

Claims 2, and 11 and 12 are dependent upon claims 1 and 10, respectively. As discussed above, claims 1 and 10 are disclosed by Kim et al. and Jiang et al. Thus, those portions of claims 2, and 11 and 12 that are recited in claims 1 and 10, respectively, are also disclosed by Kim et al. with Jiang et al.

In addition, as recited in claim 2, Kim et al. also discloses: “a web server or WAP server” (**FIG. 1: 50, 52, and 54**).

However, Kim et al. and Jiang et al. do not appear to clearly disclose the remaining limitations of claims 2, 11 and 12. To that end, with respect to claims 2, 11 and 12, in the same field of endeavor (i.e., telephone systems with IVR and ringback capabilities), Wilk discloses: “text information of the subscriber (personal) information sound is converted into a voice by a text-to-speech engine” (**FIG. 2: 130; col. 6, lines 45-52: “generate a ringback to the caller” and “caller’s identity, which would be generated using known text-to-speech engines”**).

It is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kim et al. and Jiang et al. with Wilk in order to provide the subscriber with the additional option of generating a custom ringback tone/message in text form.

Further, regarding claim 12, Kim et al. discloses: “the personal information sound is inputted as a voice via an ARS” (**FIG. 1: 56**).

Furthermore, claim 20 recites similar limitations to claim 2 and thus, Kim et al., Jiang et al. and Wilk also disclose the limitations of this claim.

Claims 4, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Jiang et al. and US Patent Application Publication No. 2004/0203613 (Zhu et al.).

Claims 4 and claims 23 and 24 are ultimately dependent upon claims 1 and 19, respectively. As discussed above, claims 1, 10 and 19 are disclosed by Kim et al. and Jiang et al. Thus, those portions of claims 1, 10 and 19 that are recited in claims 4, 13, and 23 and 24 are also disclosed by Kim et al. and Jiang et al.

Art Unit: 2617

In addition, regarding claim 24, the combination of Kim et al. and Jiang et al. disclose custom ringback tones may include music as well as voice. Thus, it is respectfully submitted that it would have been obvious to provide a custom ringback tone that combines music and voice so that, as recited in claim 24: "the subscriber (personal) information sound is outputted as a voice to a melody."

However, Kim et al. and Jiang et al. do not appear to clearly disclose the remaining limitations of the claims. To that end, in the same field of endeavor (i.e., telephone systems with call alerting capabilities), Zhu et al. discloses: "a voice modulation device" that modulates or modifies the sound of "personal information" ([0006]: **"mobile terminal can apply various modifications to a voice message and output the voice message with a different sound quality"**). It is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kim et al. and Jiang et al. to further include the "voice modulation device" disclosed by Zhu et al. in order to "reflect the characteristics of the sender" (i.e., see Zhu et al. at [0005]) or characteristics of others (e.g., celebrity voices).

Claims 7-9 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Jiang et al. and US Patent Application Publication No. 2002/0193125 (Smith).

Claims 7-9 and 16-18 are dependent upon claims 1 and 10, respectively. As discussed above, claims 1 and 10 are disclosed by Kim et al. and Jiang et al. Thus, those portions of claims 7-9 and 16-18 that are recited in claims 1 and 10, respectively, are also disclosed by Kim et al. with Jiang et al.

However, Kim et al. and Jiang et al. alone do not clearly disclose the remaining limitations of the claims. To that end, in the same field of endeavor (i.e., telephone systems that indicate call related by the use of tones), Smith discloses: subscriber information sound and/or replacement sound that are "different by time zone" or "set by time zone" ([0004]: **"user is made aware of an additional charge being incurred base on the user's time zone, by the use of sound or vibration"**).

It is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Kim et al. and Jiang et al. with Smith in order to provide the subscriber with an call alert from the ringback tone that gives an indication of changing time zones.

Art Unit: 2617

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Jiang et al., Wilk and Zhu et al.

Claim 13 is dependent upon claim 12. As discussed above, claim 12 is disclosed by Kim et al., Jiang et al. and Wilk. Thus, those portions of claim 13 that are recited in claim 12 are also disclosed by Kim et al., Jiang et al. and Wilk.

However, Kim et al., Jiang et al. and Wilk do not appear to clearly disclose the remaining limitations of the claim. To that end, in the same field of endeavor (i.e., telephone systems with call alerting capabilities), Zhu et al. discloses: "a voice modulation device" that modulates or modifies the sound of "personal information" ([0006]: "**mobile terminal can apply various modifications to a voice message and output the voice message with a different sound quality**"). It is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kim et al., Jiang et al. and Wilk to further include the "voice modulation device" disclosed by Zhu et al. in order to "reflect the characteristics of the sender" (i.e., see Zhu et al. at [0005]) or characteristics of others (e.g., celebrity voices).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Application Publication No. 20050096006 discloses a subscriber selectable alternative to audible ringback signals. US Patent No. 7,509,149 discloses a method and apparatus for changing a sound source of a supplementary service using a ring back tone on calling. US Patent Application Publication No. 20040174983 discloses configurable call processing tones.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2617

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MYRON WYCHE whose telephone number is 571-272-3390. The examiner can normally be reached on Monday-Friday, 8 a.m. to 5 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Myron Wyche/

December 18, 2011

Patent Examiner

Art Unit 2617